Public Renewables Partnership

Western Area Power Administration

Introduction to the Public Renewables Partnership

Western AREA POWER ADMINISTRATION

Renewable Energy Partnerships for Public Power

- **PRP enables public organizations to integrate renewables into power portfolios and business strategies**
- **What do we do?**
  - Identify project opportunities
  - Facilitate project teams
  - Assist in fundraising
  - Manage projects
  - Facilitate knowledge- and information-sharing
- **What do we not do?**
  - PRP does not build, buy or operate renewable energy sources
  - PRP does not purchase or trade power.

PRP's principal goal

- **Provide quality information and knowledge to PRP members to support renewable energy activities.**

Who are our members?

- **Any public organization wishing to develop renewable energy**
  - Municipal public power organizations, such as municipal utilities, municipal utility districts and irrigation districts
  - Joint power agencies: Joint Action Agencies, Federal Power Agencies, Regional & State Public Power Associations (for example, Northern California Power Authority
- **Other constituents:**
  - Prospective partners
  - Partners' customers
  - Foundations
  - Government.

Who runs PRP?

- **PRP is operated and administered by the Center for Resource Solutions (CRS)**
  - A San Francisco-based 501(c)3 organization delivering renewable energy solutions in a variety of sectors.
- **Advisory support provided by the National Laboratories.**
- **Development assistance provided by:**
  - Western Area Power Administration
  - U.S. Department of Energy, Wind Powering America Program
  - American Public Power Association
  - Individual public power organizations.

Why Renewable Energy is Important in Your Resource Mix

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Renewables make sense economically

- **Zero fuel cost**
  - If you build renewable capacity, all the costs are in construction, operation & maintenance.
- **Price is independent of fuel price fluctuations**
  - If you buy from renewable sources, price per kWh will remain relatively constant.
  - What killed PG&E was not only high fuel costs but also unpredictable fuel costs.
  - Resource planning omits price volatility at its peril.
- **Adding renewables diversifies power portfolio**
  - This is a hedge against risk.

Renewables make sense politically

- **Greater energy security**
  - Renewable energy is abundant within U.S. borders
  - More domestic power sources means less reliance on Gulf oil.
- **Net environmental impacts are relatively modest**
  - Atmospheric pollution is zero: huge benefit.
  - Corporations see the benefits associated with Green Tags

How PRP Can Meet Your Renewable Energy Needs

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Our research of the public power market has identified several needs:

- **Renewable Resources Area not Considered Mainstream**
  - Okay for small demonstration projects
  - Good Public Relations for Utility
- **Power Plant and Resource Planners**
  - Planning for generation 5 to 10 years out
  - Power plant construction corresponds with 6 year financial plan
  - Renewable resources not generally considered in this process as a viable resource compared to coal and gas
- **Green Power is Attractive**
  - Power plant and resource planners see value in renewable resources from the standpoint of price stability and environmental benefits
  - Siting traditional power plants is becoming a nightmare in some locations
- **Public Power Utilities and Coops Want and Need Assistance**
  - Identifing large project opportunties 70 to 500 MW
  - Fact-sheets regarding cost, barriers and benefits associated with project opportunities
  - Information and services to assist in streamlining renewable power contracts, including buy, build and aggregation (across multiple organizations). Resource planning assistance on renewables, including buy vs. build and internal vs. aggregated.
  - Knowledge-sharing on best practices.

Service Areas - Details

Evaluation of:

- Renewable energy resources and projects
- Potential availability of renewables
- End-customer needs

Economic Services

- Green pricing
- Risk
- Portfolio analysis & design

Acquisition (buying or building renewables)

- Resource planning
- Leveraging government resources
- Purchase assistance

Constituent Relations

- Assisting in educating and communicating to end customers and other stakeholders.

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PRP initiated in Spring 2001 in California

- **Collaborative organization**
  - PRP was formed in 2001 initially under the name of Public Power Renewable Energy Action Team (PPREAT) as a collaboration of California municipal utilities, public power agencies and CRS.

Summer & Fall 2001

- **CRS & Northern California Power Authority bid, and are awarded, nearly $6 million from CEC.**
  - CEC grant to fund renewable energy projects in conjunction with California public power organizations.
  - Match funds from participating organizations bring program budget to just over $7 million over three years.

Winter 2001 - 2002

- **CRS becomes the administrative home for PRP**
  - Since CRS will administer the CEC/NCPA program, it is also the natural choice for the administration of PRP more broadly.
  - CRS hires a Program Manager (Fraser Smith) and Research Director (Ray Dracker)
- **Preliminary business strategy & market research**
  - Collaboration of CRS, Lawrence Berkeley National Lab and Western Area Power Administration.
- **Program activities**
  - Integrated contact management system in development with LBNL.
  - Initial website development under way with Washington State University, ESource & Silicon Valley Power. Funded by APPA.

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CEC PIER

Ten projects over three years, divided into four major issue areas:

- Assessing and Targeting Renewable Energy Development
- Increasing Affordability of Existing Renewable Energy Facilities
- Expanding Affordability and Diversity Using Renewable Distributed Generation
- Developing Renewable Energy Technologies for Tomorrow's Electricity System

- **Program launch expected early in May 2002**
  - CRS presently finalizing its contract with CEC.
  - CRS is assembling a Renewable Power Advisory Committee to provide high-level support and advice.
  - Utility partners and subcontractors putting program resources in place.

Long-term evolution of PRP

- **PRP presently expanding within Western Region**
  - California, Nevada, Arizona, Utah
  - Other states to follow.
- **Present focus is on public power agencies and public utilities**
- **Future members might include co-operatives and non-utility municipalities**
  - Several within California already have expressed interest.
  - Potential expansion nationally

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Project 1.1: Feasibility of Interconnecting Pacific HVDC Intertie

Project 1.2: New Wind Site ID and Qualification

Project 1.3: New Geothermal Site Identification & Qualification

Project 2.1: Existing Geothermal Facility Improvements

Project 3.1: Distributed Generation Assessment

Project 3.2: Biomass Project Distributed Generation Value Analysis

Project 4.1: Solar Thermal Parabolic Trough Powerplant

Project 4.2: Hybrid Solar / LFG

Project 4.3: Energy Storage for Renewable Generation

For Discussion

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We would like to hear from you about:

- Renewable energy projects under way
- Plans and ideas for future activities
- Needs for programs and services
- Obstacles to renewable energy development

PRP activities

- Which specific activities would provide the greatest immediate value?
- How to prioritize, plan and fund them?